## CLAIMS

- 1. An asynchronous transfer mode method of transmitting digital signals in which terminals (16, 18) send to the same station (20), calls are transmitted by cells (40, 42, 44, 46), said terminals send successively in separate periods (60, 62, 64, 66; 70, 72, 74), and each cell is assigned at least two orthogonal codes (C1, C2, C3, C4), characterized in that the duration of the period during which each terminal sends and/or the number of codes assigned to each terminal and/or the number of symbols assigned a particular code in a terminal can be selected on each sending as a function of a particular power level (80).
- 2. A method according to claim 1, characterized in that a guard interval (52, 54; 56, 58) is provided between the end of sending by one terminal and the start of the next sending by another terminal.

3. A method according to either claim 1 or claim 2, characterized in that if a terminal sends during a given time period (70), that period is uninterrupted.

- 4. The use of the method according to any preceding claim in a telecommunication system in which the terminals (16, 18) communicate with the station (20) via a satellite, for example a non-geosynchronous satellite.
- 5. A method according to claim 4, characterized in that the duration of the period of sending by each terminal and/or the number of codes assigned to that terminal are chosen as a function of its position relative to the station (20).